

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/08316

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04B10/17

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/021288 A1 (HIRONISHI KAZUO ET AL) 13 September 2001 (2001-09-13)	1-4, 21-30
A	page 1, paragraph 11 page 2, paragraph 22; figure 8 page 8, paragraph 115 - paragraph 116	5-20
A	US 5 350 913 A (HIRANO ISUKE ET AL) 27 September 1994 (1994-09-27) column 7, line 29 - line 60; figures 5, 12, 14	1-30

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

29 January 2004

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2001021288	A1	13-09-2001	JP	2001249371 A	14-09-2001
			- EP -	1130456 A2	05-09-2001
US 5350913	A	27-09-1994	JP	5303125 A	16-11-1993
			DE	69332322 D1	31-10-2002
			DE	69332322 T2	22-05-2003
			EP	0567312 A2	27-10-1993